Applicant(s):
 John David Fraser, et al.
 Attorney Docket No.: 55503-002001

 Serial No.:
 10/006,797
 Client Ref. No.: MK504269-003

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AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of claims:

- (Cancelled)
- 2. (Previously Presented) A conjugate which comprises an antigen-presenting cell (APC) targeting molecule coupled to an antigen, wherein said APC-targeting molecule includes a Class II MHC binding site and a T-cell receptor binding site of a superantigen, the T-cell binding site having one or more mutations that reduce its T-cell proliferation activity compared to the wild type T-cell receptor binding site, and wherein the conjugate binds to a Class II MHC molecules.
- (Previously Presented) A conjugate according to claim 2, wherein the mutation of the T-cell receptor binding site is a substitution, deletion or addition.
- (Previously Presented) A conjugate according to claim 2, wherein the Tcell binding site of the antigen-presenting cell (APC) targeting molecule has been deleted.
- 5. (Currently Amended) A conjugate according to claim 2, wherein the antigen-presenting cell (APC) targeting molecule is a <u>mutated superantigen of derived from Staphylococcus aureus</u> and/or <u>Streptococcus pyogenes</u>, <u>wherein one or more mutations have been introduced into the T-cell receptor binding site of the superantigen to reduce its T-cell proliferation activity compared to its wild-type counterpart.</u>

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(Currently Amended) A conjugate according to claim 5, wherein
antigen-presenting-cell (APC) targeting molecule is derived from the mutated
superantigen is a SPE-C mutant, in which one or more mutations have been introduced
into its T-cell receptor binding site to reduce its T-cell proliferation activity compared to
the wild-type SPE-C.

7-9. (Cancelled)

- (Previously Presented) A conjugate according to claim 2, wherein the antigen-presenting- cell (APC) targeting molecule is coupled reversibly to an antigen.
- 11. (Previously Presented) A conjugate according to claim 2, wherein the antigen is a protein, a polypeptide and/or a peptide.

(Cancelled)

 (Previously Presented) A conjugate according to claim 2, wherein the antigen is non-immunogenic when not coupled to the antigen-presenting cell (APC) targeting molecule.

14. (Cancelled)

- (Previously Presented) Pharmaceutical composition comprising a conjugate according to claim 2 and a pharmaceutically acceptable carrier, adjuvant, excipient and/or solvent.
- (Previously Presented) Vaccine comprising a conjugate according to claim 2.

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- 17. (Withdrawn) Method of therapeutic or prophylactic treatment of a disorder which requires the induction or stimulation of the immune system, comprising the administration to a subject requiring such treatment of an immunomodulator according to claim 2.
- 18. (Withdrawn) A method according to claim 17, wherein the disorder is selected from the group consisting of bacterial, viral, fungal or parasitic infection, autoimmunity, allergy and/or pre-neoplastic or neoplastic transformation.

19-20. (Cancelled)

- (Withdrawn) Method of preparing an immunomodulator comprising the steps of:
- (a) introducing a modification and/or a deletion into the T-cell binding site of an antigen-presenting cell (APC) targeting molecule which is structurally a superantigen, and
 - (b) coupling thereto and immunomodulatory antigen.
- (Withdrawn) A method according to claim 21, wherein the antigen-presenting cell (APC) targeting molecule is selected from the group of SPE-C, SMEZ and SEA.
- (Withdrawn) A method according to claim 21, wherein the antigen-presenting cell (APC) targeting molecule is SPE-C Y15A R181Q.
- (Withdrawn) A method according to claim 21, wherein the antigen-presenting cell (APC) targeting molecule is designated SPEC-Y15A.C27S.N79C.R181Q.

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25. (Withdrawn) A method according to claim 21, wherein the antigen-presenting cell (APC) targeting molecule is SPEC (-20-90).

- 26. (Withdrawn) Method of increasing antigenicity of a compound, comprising the coupling of said compound to an antigen-presenting-cell (APC) targeting molecule, wherein said APC-targeting molecule mimics a superantigen but does not include a fully functional T-cell receptor binding site.
- 27. (Withdrawn) A method according to claim 26, wherein said APC-targeting molecule is a molecule which is structurally a superantigen but for a disrupted T-cell receptor binding site such that the molecule has little or no ability to activate T-cells.
- 28. (Withdrawn) A method according to claim 26, wherein the T-cell receptor binding site, or at least a part thereof, of the antigen-presenting-cell (APC) targeting molecule has been modified by substitution or addition.
- 29. (Withdrawn) A method according to claim 26, wherein the T-cell binding site of the antigen-presenting cell (APC) targeting molecule has been deleted.
- 30. (Withdrawn) A method according to claim 26, wherein the antigen-presenting cell (APC) targeting molecule is derived from Staphylococcus aureus and/or Streptococcus pyogenes.
- 31. (Withdrawn) A method according to claim 30, wherein antigen-presenting cell (APC) targeting molecule is derived from SPE-C, SMEZ and/or SEA.

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 (Withdrawn) A method according to claim 31, wherein the antigen-presenting cell (APC) targeting molecule is designated SPEC-Y15A as herein defined.

- (Withdrawn) A method according to claim 31, wherein the antigen-presenting cell (APC) targeting molecule is designated SPEC-Y15A R181Q.
- (Withdrawn) A method according to claim 31, wherein the antigen-presenting cell (APC) targeting molecule is designated SPEC-Y15A.C27S.N79C.R181Q
- (Withdrawn) A method according to claim 31, wherein the antigen-presenting cell (APC) targeting molecule is SPEC (-20-90).
- (Withdrawn) A method according to claim 26, wherein the antigen-presenting- cell (APC) targeting molecule is coupled reversibly to said compound.
- (Withdrawn) A method according to claim 26, wherein the compound is selected from the group consisting of a protein, a polypeptide and/or a peptide, a carbohydrate or a nucleic acid.
- (Withdrawn) A method according to claim 26, wherein the compound is non-immunogenic when not coupled to the antigen-presenting cell (APC) targeting molecule.
- 39. (Previously Presented) A conjugate according to claim 2, wherein the mutated T-cell receptor binding site reduces the T-cell proliferation activity to equal to or greater than 10,000 folds compared to the wild type T-cell receptor binding site.

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 (New) The conjugate of claim 6, wherein the SPE-C mutant is SPEC-Y15A.

- (New) The conjugate of claim 6, wherein the SPE-C mutant is SPEC-Y15A.R181Q.
- (New) The conjugate of claim 6, wherein the SPE-C mutant is SPEC-Y15A.C27S.N79C.R181Q.
- (New) The conjugate of claim 6, wherein the SPE-C mutant is SPEC(-20-90).
- 44. (New) The conjugate of claim 39, wherein the APC-targeting molecule is a mutated SPE-C, in which the amino acid residue Y15 is mutated.
- 45. (New) The conjugate of claim 39, wherein the APC-targeting molecule is a mutated SPE-C, in which the amino acid residue R181 is mutated.